

Work Order ID 71800

Tuesday, July 12, 2011 10:05:31 AM

Page 1

Item ID: D117-762-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Replacement Skidtube

Start Date: 7/12/2011 Start Qty: 1.00

Cust Item ID:

Required Date: 7/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *[Signature]* Date: 7-8-11 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3492	C								
D3582	Rev A								
100		0.00							
	DOCUMENT CONTROL								<i>N/A [Signature]</i>
DC									
Document Control	Memo Photocopy bluefile & type labels per PPP D117-762-041	0.00							CHG001
120		0.00							
	BENDING MACHINE - SKIDTUBES								
CNC Bend 1									
CNC Delta 100 Bender	Memo Bend tube as per program D3582 on CNC Bender and Dwg D3582. Folio 3, use bending aid DT9632 2- cut fwd end of tube as per dwg	0.00							<i>-1 [Signature] BE 11/07/12</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00



Skidtubes

0.00

Skidtubes

Memo

Skidtubes

1-Cut Aft end using DT8185

2-Deburr ends

3-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***

4-Locate DT 8973 & Drill Ground wire hole on top of Tube.

5-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.

6-Drill pilot holes for wearplates using DT8900

7-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.

8- open ground wear holes to 0.391" as per section B-B

9-Open Aft Cap holes using .209" drill.

10-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size.

OK 11/07/14

OK 11/07/14

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Setup Start

Stop

[illegible]**Cust Item ID:**

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

Customer:

Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Operation Description

Set Up/ Run Hours

Tool ID

Tool #

Plan Code

**Accept
Qty**

Reject
Qty

Reject Number

**Insp.
Stamp**

0.00



Skidtubes

0.00

Skidtubes

Memo

1-Weld fwd cap D2964 per dwg D3582 and QSI 004

A/R AL ROD

Batch:

2-Grind flush

Skidtubes

0.00



QC10- Inspect visual per QSI004- ground welds

0.00

OC

Memo

Quality Control

0.00



QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

Quality Control

W/O:		WORK ORDER CHANGES					
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Item ID: D117-762-041

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Revision ID:

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Item Name: Replacement Skidtube

Start Date: 7/12/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				1			BEU/07/18
180 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				1	0		BEU/07/19

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Item ID: D117-762-041

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Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 7/12/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Open X-Bolt holes to finish size as per Dwg D3582, all sections

2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube, prep. tube for welding.

4-Bond web as per Dwg D3582 & QSI 015

A/R 241 Sike Flex Batch: M117516
Exp Date: 12/01/15

5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B.

A/R AL ROD Batch: M112860

6-Grind welds flush

Dr. 11/07/19
BE 11/07/20

200

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

11.07.21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Cust Item ID:

Required Date: 7/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

1 1 01 22 11

215

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Touch-up alodine as per QSI

1 9 22 1107125

220

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME 10:30
OVEN TEMPERATURE 300°
FINISH TIME: 11:00

1 9 11-7-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 71800

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Item ID: D117-762-041

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Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 7/12/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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230 QC3- Inspect Part Finish

0.00



QC Memo

0.00

Quality Control

1 0 1107/27

250 HandFinishing

0.00



HandFinish Memo

0.00

Hand Finishing

1 0 1107/27

1-Inspect for Foreign objects

2-Install Aft cap as per Dwg D3582, Detail "C"

A/R 241 Sika Flex Batch: 1117516
Exp Date: 15/09

3-Install Wearplates as per Dwg D3582,
Note:Install Bolt and washer on Ground Wire inserts on top of tube see
section D-D of dwg D3582

*****Do not install bolts where indicated on Dwg(Note #6)*****

A/R 241 Sika Flex Batch: 1117516
Exp Date: 15/09

4-assemble o'ring as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: 1117189

5- Wing Walk as per Dwg D3582 and QSI 005 4.4 117863

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Required Date: 7/18/2011 Req'd Qty: 1.00

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

260

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

mt 11 07 28 ①

270

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D117-762-041

Location:

PPP Rev:

PPP 7/790

Pump ①

280

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/7/29 ①

H11-07-28

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 1

[illegible]**Required Date:** 7/18/2011

Required Qty: 1.00

IPP Rev:B 08-02-22 change to revA as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3492-11  Plug		Manufactured	No			250	Each	14.0000	2	2			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP				14					
					70410			2					
					<u>71028</u>			12					
D3492-13  Plug		Manufactured	No			250	Each	40.0000	6	6			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP				20					
					<u>71211</u>			20					
				FP-13				5					
					71211			5					
				FP-B				15					
					46693			15					
D3492-9  Plug		Manufactured	No			250	Each	41.0000	2	2			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP-A				41					
					<u>46694</u>			41					

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Work Order ID: 71800

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

D2962-150

Manufactured No

Each

80.0000

1



3.540 Outer Tube, Extrud



BB 11/07/12

Location

Loc Qty

Loc Code

HALL

80

28672

7

59934

73

1

D2964

Manufactured No

140

Each

19.0000

1

1



Cap



BE 11/07/14

Location

Loc Qty

Loc Code

LG002

19

14101

5

64654

14

1

D2971

Manufactured No

190

Each

14.0000

1

1



Cross Bolt Spacer



BE 11/07/20

Location

Loc Qty

Loc Code

LG001

14

44445

14

6

D3584-1

Manufactured No

190

Each

4.0000

1

1



Web



Oh.
11/07/19

Location

Loc Qty

Loc Code

LG

4

71143

4

70953

1

Tuesday, July 12, 2011 10:05:37 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

D2973 Manufactured No 190 Each 128.0000 2 2



Cross Bolt Spacer



BBU/07/20

Location Loc Qty Loc Code

LG002 128

14636 128

2

D3662-3 Manufactured No 190 Each 15.0000 1 1



Crossbolt Spacer



BBU/07/20

Location Loc Qty Loc Code

LG001 15

44456 15

1

D3662-1 Manufactured No 190 Each 1.0000 3 3



Crossbolt Spacer



BBU/07/20

Location Loc Qty Loc Code

LG001 1

64451 1

B 71799 #2
B 72258 #1

ALS4-1032-130 Purchased No Each 2,406.000 36



Insert



36

M 1104/27

Location Loc Qty Loc Code

ST281 8

117331 8

ST282 2398

117717 654

118237 1744

M 118386

x 36

Tuesday, July 12, 2011 10:05:38 AM

Shop Packet Print

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Work Order ID: 71800

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

ALS4-428-165

Purchased

No

Each

517.0000

2



Handwritten: 11/07/27

Inserts

Location

Loc Qty

Loc Code

FP

486

117769

486

FP-B

31

114172

31

D2965

Manufactured

No

250

Each

22.0000

1



Handwritten: 11/07/27

Cap, 105 Skidtube

Location

Loc Qty

Loc Code

FP006

22

52057

22

D3508-3

Manufactured

No

250

Each

15.0000

1



Handwritten: 11/07/27

Wearplate

Location

Loc Qty

Loc Code

FP021

15

38527

1

71210

14

D3508-9

Manufactured

No

250

Each

8.0000

1



Handwritten: 11/07/27

Wearplate

Location

Loc Qty

Loc Code

FP021

8

70307

8

Handwritten: x1

Tuesday, July 12, 2011 10:05:38 AM

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Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 6

Work Order ID: 71800

Parent Item: D117-762-041



Parent Item Name: Replacement Skidtube



Start Date: 7/12/2011


Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

D3508-13	Manufactured	No	250	Each	1.0000	1	1
							<u>31 1107/27</u>
Wearplate							

						<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
						FP016	1		
						65191	1	1371027	<u>x1</u>
AN960JD10L	Purchased	No	250	Each	0.0000		2		
									
Washer									
AN3C4A	Purchased	No	250	Each	1,796.000		28		
									
BOLT									
									<u>31 1107/27</u>

						<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
						ST350	1796		
						117313	2		
						117688	732		
						117795	500		
						117872	22		<u>x28</u>
						118012	500		
						118112	40		
AN3C5A	Purchased	No	250	Each	1,255.000		2		
									
Bolt									<u>31 1107/27</u>

						<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
						FP-A	7		
						115835	7		
						ST350	1248		
						116419	28		
						116549	42		
						117343	500		
						117764	300		
						117872	378		<u>x2</u>

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Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 7

Work Order ID: 71800

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

AN960JD416L NAS1149D0416J Purchased No

250

Each

19.0000

2

2



Washer

1118131



(x2) ML 11/07/27

Location

Loc Qty

Loc Code

FP-B

17

110153

17

ST298

2

110153

2

AN960C10L NAS1149C0332 Purchased No

250

Each

0.0000

28

28



washer

1118306



(x28) ML 11/09/27

AN4-4A Purchased No

250

Each

86.0000

2

2



Bolt



ML 11/07/27

Location

Loc Qty

Loc Code

FP-B

40

114615

40

ST356

46

114615

46

NAS1611-012 Purchased No

250

Each

38.0000

6

6



O-RING



ML 11/07/27

Location

Loc Qty

Loc Code

FP-A

38

113845

38

1118384

x6

Tuesday, July 12, 2011 10:05:39 AM

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, July 12, 2011 10:05:39 AM

Page 8

Work Order ID: 71800

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-015

Purchased

No

250

Each

89.0000

2

2



O-RING



Handwritten: Jd

Handwritten: 11/07/27

Location

Loc Qty

Loc Code

FP-A

89

115101

85

116081

4

Handwritten: XZ

NAS1611-016

Purchased

No

250

Each

100.0000

2

2



O-RING



Handwritten: Jd

Handwritten: 11/07/27

Location

Loc Qty

Loc Code

FP-A

100

112492

58

113524

42

Handwritten: XZ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

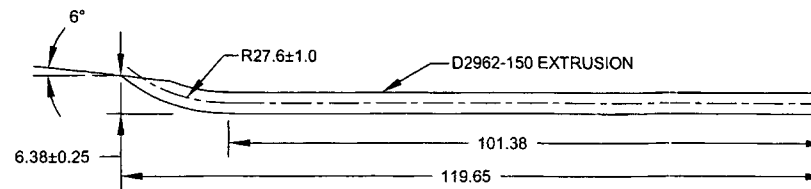
NOTE: Date & initial all entries

PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

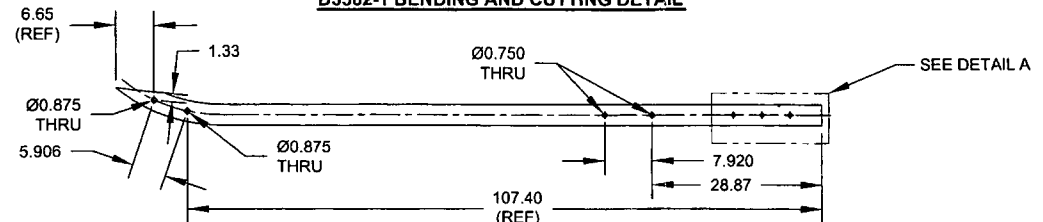
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

GENERAL NOTES:

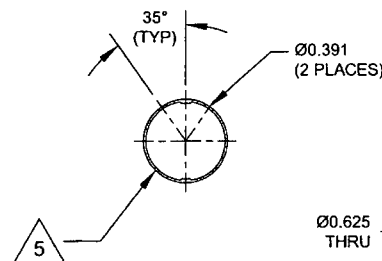
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL Ø0.297 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
- FINISH:
 - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
 - POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
 - ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



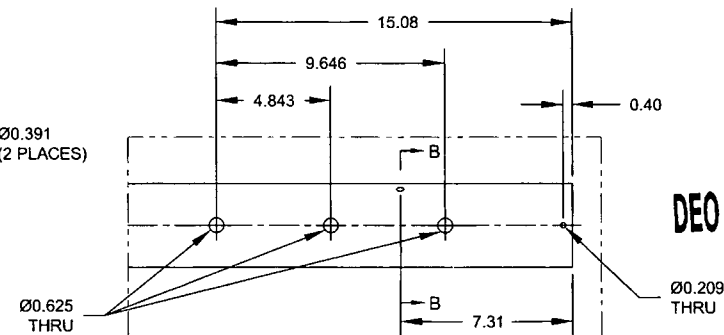
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B
SCALE 1:5



DETAIL A
SCALE 1:5

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 71800

A	NEW ISSUE	PH	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	PH		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH		
DATE	07.06.08		

DART AEROSPACE USA, INC
PORT HADLOCK, WA
DRAWING NO. D3582
REV. A
SHEET 1 OF 2
TITLE BK 117 SKIDTUBE ASSEMBLY
SCALE 1:20
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PH 118-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D2964 CAP
(GRIND FLUSH)

DETAIL C
SCALE 1:10

D2971 SPACER

AFTER FINISH
INSTALL
D3492-049
PLUG ASSEMBLY
(2 PLACES)

SECTION D-D
SCALE 3:10

AFTER FINISH
INSTALL
D3492-051
PLUG ASSEMBLY
(2 PLACES)

SECTION E-E
SCALE 3:10

D3662-3 SPACER

SECTION D-D NOTES

AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2971 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-049 PLUG ASSEMBLY (2 PLACES)

SECTION E-E NOTES

AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-3 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-051 PLUG ASSEMBLY (2 PLACES)

D2973 SPACER
(2 PLACES)

SECTION F-F
SCALE 3:10

SECTION F-F NOTES

AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2973 SPACER (2 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.625 DRILL TO REMOVE SPILL OVER

D3584-1 WEB (REF)
D3662-1 SPACER
(3 PLACES)

AFTER FINISH, INSTALL
AELS-1032-130
INSERT (36 PLACES)

AN3C4A BOLT (1)
AN960C10L WASHER (1)
(28 PLACES)

SECTION G-G
SCALE 3:10

SECTION G-G NOTES

AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-1 SPACER (3 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-053 PLUG ASSEMBLY (6 PLACES)

AFTER FINISH, INSTALL
ALS7-428-165 INSERT (1)
AN4-4A BOLT (1)
AN960JD416L WASHER (1)
(2 PLACES)

AFTER FINISH
INSTALL,
D3492-053
PLUG ASSEMBLY
(6 PLACES)

DETAIL C

D3558-9
D3508-9

NO BOLTS AT
THESE LOCATIONS

D3558-3

D3508-3

D3508-11

D3508-11

D3582-041 ASSEMBLY DETAIL

BLACK ANTI-SKID

BLACK ANTI-SKID (TYP)

D3582-041 BLACK ANTI-SKID DETAIL

D3584-1 WEB
(REF)

AN3-5A BOLT (1)
AN960JD10L WASHER (1)
(2 PLACES)

DETAIL H
SCALE 1:5

DEO ATTACHED

RELEASED

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED	PH	DRAWING NO.	REV. A
MFG. APPR.	PH	D3582	SHEET 2 OF 2
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	BK 117 SKIDTUBE ASSEMBLY	1:20
DATE	07.06.08	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC	

W/O:		WORK ORDER CHANGES					
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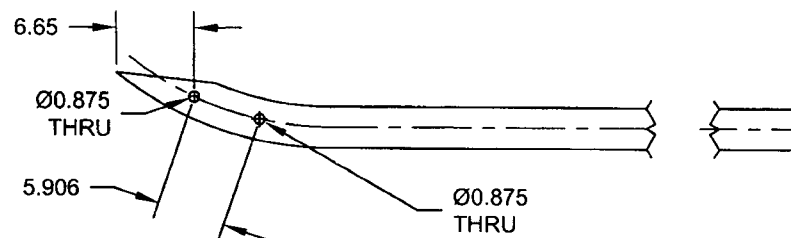
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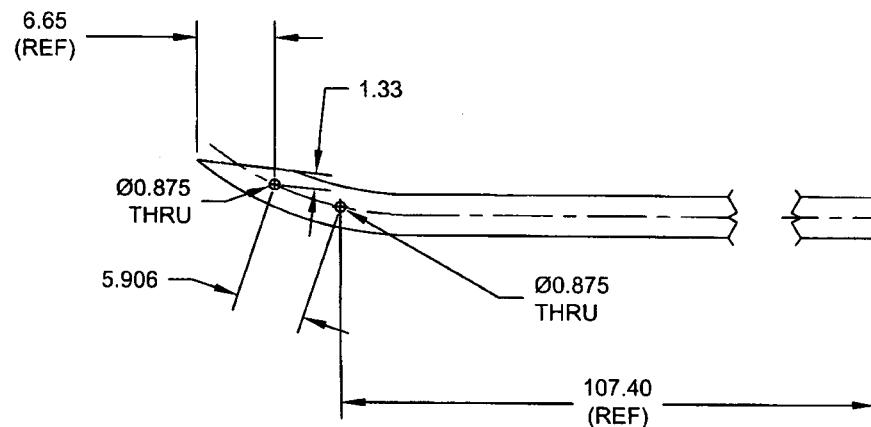
DRAWING NO. D3582	TITLE BK 117 SKIDTUBE ASSEMBLY	REV. A	DART AEROSPACE USA, INC ENGINEERING ORDER		D.E.O. NO. D3582-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>PH</i>	CHECKED <i>A</i>	MFG. APPR. <i>E</i>	APPROVED <i>WJ</i>		DE APPR. <i>MA</i>		
DATE 09.04.06	DATE 04.04.06	DATE 09.04.06	DATE 19/04/06		DATE 09.04.06		

FOR EASE OF MANUFACTURE AND TO ENSURE THE FIT OF BRISTOL WIRESTRIKE SKID GEAR DEFLECTOR:
UPDATE DIMENSIONING OF 2 FWD HOLES ON SHEET 1 AS SHOWN

IS:



WAS:



RELEASED
09/04/22 *WJ*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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